

PATENT COOPERATION TREATY

22 FEB 2005

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT



To:
USUI SHINICHI

**NO.602, Fuji Bldg.,
2-3, Marunouchi 3-chome,
Chiyoda-ku, Tokyo 100-0005
Japan**

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

07.12.2004

Applicant's or agent's file reference
CFO17500WO

IMPORTANT NOTIFICATION

International application No.
PCT/JP 03/10782

International filing date (day/month/year)
26.08.2003

Priority date (day/month/year)
28.08.2002

Applicant

CANON KABUSHIKI KAISHA

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/JP

Japan Patent Office

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Authorized officer

Commissioner of the Patent Office

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9279

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT



To: **USUI SHINICHI**

**NO.602,Fuji Bldg.,
2-3,Marunouchi 3-chome,
Chiyoda-ku,Tokyo 100-0005
Japan**

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY
EXAMINING AUTHORITY

(PCT Rule 66)

Date of mailing
(day/month/year) **20.7.2004**

Applicant's or agent's file reference
CF017500WO

REPLY DUE within **2 months** from
the above date of mailing

International application No.
PCT/JP 03 /10782

International filing date (day/month/year)
26.08.2003

Priority date (day/month/year)
28.08.2002

International Patent Classification (IPC) or both national classification and IPC
Int.Cl. **C09K11/06, H05B33/14**

Applicant

CANON KABUSHIKI KAISHA

1. ☐ The written opinion established by the International Searching Authority:
☐ is ☐ is not
considered to be a written opinion of the International Preliminary Examining Authority.
2. This 1 (first, etc.) opinion contains indications relating to the following items:
 - ☒ Box No. I Basis of the opinion
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary report on patentability
(Chapter II of the PCT) must be established according to Rule 69.2 is: **28.12.2004**

Name and mailing address of the IPEA/JP

Japan Patent Office

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WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/JP 03 / 10782

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This opinion is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages _____ as amended (together with any statement) under Article 19
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to the sequence listing (specify): _____

4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to the sequence listing (specify): _____

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/JP03 / 10782

Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1, 2, 6, 7</u>	YES
	Claims	<u>3, 4, 5, 8, 9, 10</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-10</u>	NO
Industrial applicability (IA)	Claims	<u>1-10</u>	YES
	Claims		NO

2. Citations and explanations
(Document)

D1:JP 7-90259 A D2:JP 8-259934 A D3:US 5989737 A D4:JP 200-12651 A
D5:JP 2002-50481 A D6:JP 2002-237386 A D7:JP 2001-118683 A(especially [0044])
D8:US 507742 A D9:JP 2002-212150 A D10:WO 00/22027 A1

The subject matter of claim 1,6 does not appear to involve an inventive step in view of the document 1-8 cited in the ISR. D1-3 disclose an EL element layer(light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials. Although D1-3 does not disclose luminescent materials represented by the formula[2],the luminescent materials were well-known as luminescent materials in the technical field to which the invention pertains(see D4-8). Therefore, employing the luminescent materials disclosed in D4-8 as luminescent materials combined with amine compounds disclosed in D1-2 would have been easily conceived by the person skilled in the art.

The subject matter of claim 2,7 does not appear to involve an inventive step in view of the document 1-4,8 cited in the ISR. D1-3 discloses an EL element layer (light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials. Although D1-3 does not disclose luminescent materials represented by the formula[3],the luminescent materials were known as luminescent materials in the technical field to which the invention pertains(see D4,8). Therefore, employing the luminescent materials disclosed in D4,8 as luminescent materials combined with amine compounds disclosed in D1-3 would have been easily conceived by the person skilled in the art.

The subject matter of claim 3,4,8,9does not appear to be novel with respect to D3. D3 discloses an EL element layer(light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials represented by the formula[4][5](see claims and [0023]).

In addition,the subject matter of claim 3,4,8,9 does not appear to involve an inventive step in view of the document 1-3,8 cited in the ISR. D8 discloses luminescent materials represented by the formula[4]. Therefore, employing the luminescent materials disclosed in D8 as luminescent materials combined with amine compounds disclosed in D1-3 would have been easily conceived by the person skilled in the art.

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WRITTEN OPINION OF THE
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V

The subject matter of claim 5,10 does not appear to be novel with respect to D9. D9 discloses an EL element layer(light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials represented by the formula[6](see claims and [0034][0039]).

In addition,the subject matter of claim 5,10 does not appear to involve an inventive step in view of the document 1-3,9,10 cited in the ISR. D10 discloses luminescent materials represented by the formula[6]. Therefore, employing the luminescent materials disclosed in D10 as luminescent materials combined with amine compounds disclosed in D1-3,9 would have been easily conceived by the person skilled in the art.